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Is Globalization Good for the Poor in China?

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Developing countries worry that opening up to trade with the rest of the world may make the poor poorer and the rich richer, with China sometimes cited as an example of growing income inequality. A recent IMF study, however, finds that the reality is far more complex.

What trade openness does for the poor in developing countries is a controversial issue. It is sometimes argued that the poor have been made worse off by globalization or, at least, that the benefits have gone disproportionately to the rich.

Much of the research that has examined the impact of globalization has been based on cross-country comparisons. This approach is tainted with two key problems. The data on income and inequality in different countries cannot always be compared because of differences in the definition of variables and data-collection methods. It is also difficult to control for differences in culture and institutions, including the legal system, that may influence growth or inequality.

Professors T.N. Srinivasan and Jagdish Bhagwati argued in a paper written in 1999 that cross-country regressions are deficient and cannot be relied on to unravel the complex links between globalization, growth, poverty, and inequality. They insisted that the most compelling evidence must come from careful case studies. One may not fully agree with Srinivasan and Bhagwati, but their warning should give sufficient pause for us to complement the cross-country studies with careful studies of individual countries. The data are much more comparable, and the culture and institutions are also much

more similar, for different regions within a country than they are across countries.

In that spirit, we decided to closely examine the impact of globalization on the living standards of the poor and on income inequality in China (see box). While the Chinese economy has dramatically increased its openness over the past two decades, income inequality has risen as well. The World Bank estimates that China's Gini coefficient—a measure of the inequality of income distribution in a society (0 being perfect equality and 100 being complete inequality)—rose from 28.8 in 1981 to 38.8 in 1995. From these aggregate statistics, it is tempting to conclude that embracing globalization has contributed to the rise in inequality. But our study suggests a different conclusion, which might be of interest to both globalization enthusiasts and skeptics.

What makes China a good case study?

Reason #1. A large country, China represents a lot of observations and a chance to make statistically powerful inferences. It is harder to do a similar analysis for smaller economies, like Bangladesh and Costa Rica, that have also recently experienced huge increases in their ratios of trade to GDP.

Reason #2. China is a developing country that has embraced globalization in the areas of trade and foreign direct investment. Before 1978, when the government formally adopted a policy of opening to the outside world, China's foreign trade was negligible, but, since then, the ratio of trade to GDP has quadrupled—from a mere 8.5 percent in 1978 to 36.5 percent in 1999. China has transformed itself from a hostile investment environment into a major destination for foreign direct investment.

Reason #3. Poverty in China accounts for a major share of world poverty. In 1978, based on the World Bank's definition of extreme poverty as living on $1 a day or less after purchasing-power adjustment, there were 600 million poor people in China, more than one-third of the world's total. Any change in poverty in China would have a significant impact on world poverty.

Reason #4. China represents a quasi-natural

experiment. Even though changes in tariffs apply equally to all regions, different parts of the country have experienced vastly different effective changes in openness because of variations in natural barriers to trade, such as distance from major seaports. The variations provide a good opportunity to study the impact of openness on inequality while holding constant the legal system, macroeconomic policies, culture, and other variables. During 1988-93, for example, some cities saw the ratio of exports to local GDP increase by 50 percentage points, whereas others experienced an absolute decline. This regional variation is very useful for researchers studying the relationship between openness, local growth, and local inequality.

Reason #5. China's peculiar geography allows researchers to sort out causality versus correlation between openness and inequality.

- In cross-country comparisons, if there is an association between openness and inequality, it is difficult to say that openness causes growth or inequality. It is possible to attribute it to a fortuitous correlation or even a reverse causality.

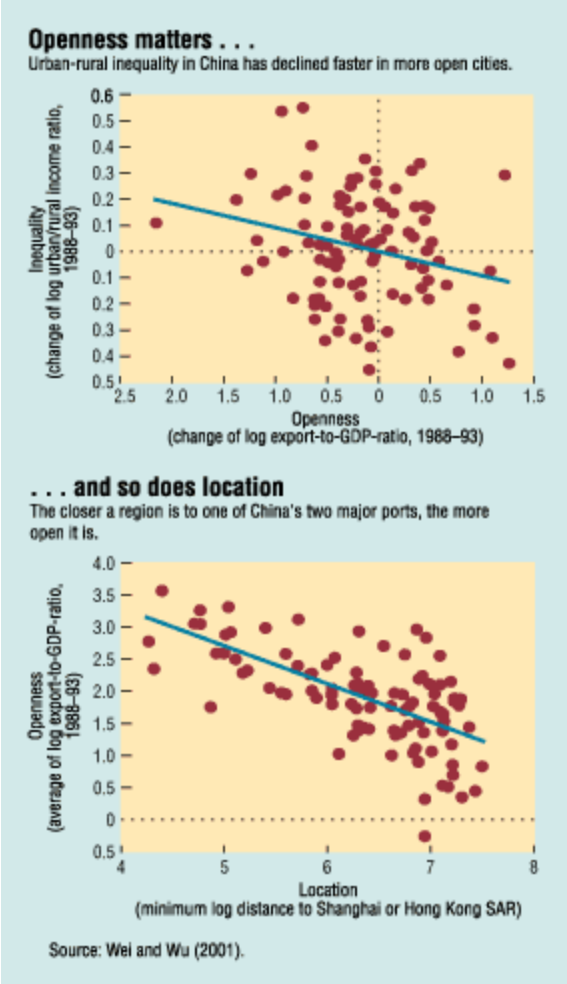
- Using geography as a key variable for openness is a methodological innovation in cross-country regressions, proposed by Jeffrey Frankel and David Romer. The idea is that a country's openness is related to its geography but that its geography is not influenced by its growth.

- China's geography lends itself to this approach. There is an ocean to the east and southeast of the country, vast deserts in the far north and west, and the world's highest mountain range in the southwest. Regional variations in trade openness (or changes in trade openness in the past two decades) can be explained largely by regional variations in the distance from major seaports. A major benefit of exploring this geographical feature is that one can argue that the correlation between regional openness and inequality (or growth) may reflect a causal relationship, with openness leading to growth, poverty reduction, and change in inequality.

Rich, poor, urban, rural

We focus on the evolution of urban-rural income inequality in 100 urban areas and 100 adjacent rural areas because this type of inequality is estimated to account for 75 percent of the change in China's overall income inequality during the 1980s and 1990s. A region in our data set is called a "city," which is defined as an administrative unit with an urban area plus the adjacent rural counties under its jurisdiction. Under China's administrative structure, a considerable proportion—45 percent—of all rural counties fall under the jurisdiction of a city. Inequality in a particular region is defined in a given year as the ratio of average income in the urban area to average income in the rural area, and openness for a region is defined as the ratio of its exports to local GDP. We look at the time period 1988-93 because 1988 was the first year that we were able to compute urban-rural income inequality, and 1993 was the last year that data for regional exports (at the level of a city) were reported.

What is the impact of the change in a city's openness on the change in its inequality, taking into account a number of other variables that can potentially affect inequality? We find that a clear pattern emerges from the data: cities that have opened up more quickly have, on average, also experienced a faster decline (or a slower increase) in local urban-rural inequality (see top panel of chart).



This pattern continues to hold as we refine the study to include a city's initial level of inequality, the average growth rate of local GDP, and a measure of differential investment rates in urban and rural areas. We also account for cities that were allowed to carry out certain market reforms ahead of the rest of the country (officially designated "coastal open cities" and special economic zones).

Can we determine if openness is a catalyst for growth or change in income inequality, or if growth or inequality brings about a change in openness? To find an answer, we look at a city's distance from either Hong Kong SAR or Shanghai, which together handled about half of the total trade in China in our sample. A region's proximity to these two ports explains a large part of the region's effective openness (see bottom panel of chart). Using this knowledge and employing what is called an instrumental variable method—a statistical technique that allows us to sort out causality from correlation—we conclude that the negative association between openness and inequality probably goes beyond a

mere correlation: an increase in trade openness creates opportunities for a reduction in urban-rural inequality.

We complement the study by making use of a data set on two household surveys across 40 rural counties and 39 urban areas in 1988 and 1995. These data enable us to compute Gini and Theil coefficients (the latter is also a common way to measure income inequality) within both urban and rural areas. The evidence suggests that, across the rural counties, there is a negative relationship between openness and inequality: those rural counties that have a bigger increase in openness tend to exhibit a reduction or a slower increase in income inequality than less open areas. Across the urban areas, however, there is either no significant relationship or a small positive relationship between changes in openness and changes in the Gini coefficient within cities.

In addition to income distribution, we also examine the living standard of the poor directly. This permits us to study the change in inequality within rural and urban areas. From 1988 to 1995, the fraction of poor people (below a common poverty line, in terms of purchasing power, for both years) declined in most of the rural counties. Moreover, the more open a rural area is, the faster the reduction in poverty. In comparison, across the 39 urban areas, there is no clear relationship between openness and inequality.

How does trade openness help the poor? In a country where arable land is scarce, the most reliable way to raise the poor's standard of living is to industrialize (and, to a lesser degree, to move to service sectors), and China's increasing openness has created more opportunities to do so. Because of the concern of Chinese leaders about overpopulation in the cities, a major part of industrialization takes place directly in the previously rural areas. Indeed, our evidence shows that rural industrial firms tend to grow faster in more open areas.

Could greater labor mobility be contributing to the changes in income inequality? Surely. Peasants migrate to urban areas seeking better-paying jobs (although migration is constrained by government policies, as noted above). The opportunity for migration tends to be better in regions with greater trade openness. Remittances from urban to rural areas by rural migrants help raise the living standard in the rural areas. The limitation of the first data set does not allow us to properly account for these remittances. That is, the true income of rural residents is underestimated, and the underestimation is

likely to be more severe in more open areas. As a result, the true poverty-reduction effect of openness is probably greater than estimated.

Interregional versus intraregional inequality

We have so far focused on intraregional inequality. Our evidence also suggests that more open areas grow faster than less open areas. This result, by itself, suggests that inequality must have increased across regions as a result of the dramatic increase in openness. What is the overall effect of an increase in openness on the change in inequality if one takes into account both interregional and intraregional inequality? We have performed some calculations but, unfortunately, the estimates are not precise enough to be conclusive. Depending on the specification one uses, one obtains either a modest reduction in overall inequality or a modest increase.

However, all regions in China, including the less open ones, have been growing relatively fast over the past two decades. As our data from household surveys suggest, most regions, including less open areas, have exhibited a drastic reduction in poverty counts. Therefore, a widening interregional inequality comes mostly from a faster rise in the standard of living for people in more open areas, not necessarily at the expense of people in less open areas. This certainly does not mean that more cannot be done to help people in less open regions. Indeed, this is a major challenge for China.

Policy implications

These findings are important not only for China; they also offer evidence that might be applicable to other developing countries. We highlight three implications here.

First, drawing inferences from summary statistics can be misleading. Over the past two decades, overall income inequality has risen in China even as globalization has increased. It is tempting—but deceptive—to conclude that openness is somehow responsible for inequality. The evolution of inequality is influenced by many factors in addition to openness. Within China, regions that have experienced a faster increase in openness have actually experienced a faster decrease, not an increase, in inequality. So embracing trade openness has in fact created opportunities for rural areas not only to grow but to grow faster than their more fortunate urban neighbors.

Second, reducing inequality should not be an end in itself. Interregional inequality in China has risen partly as a result of an uneven distribution of effective openness across different regions. A policy that slows the growth of more open areas without accelerating the growth of less open areas is unlikely to be a good policy even if it improves equality. The challenge for policymakers is to find ways to increase openness in the areas that are currently less open and to distribute the overall gains from openness more evenly across the country.

Third, raising trade barriers is tantamount to a country's imposing an unfortunate geography on itself, and such measures are likely to hurt rather than help the poor in the country. Across different regions in China, as across different countries in the world, effective openness is closely linked to geography. While overcoming geography is not easy, improvements in transportation, infrastructure, and communication technology can help.

Part of this article is based on Globalization and Inequality: Evidence from Within China, NBER Working Paper 8611, by Shang-Jin Wei and Yi Wu (Cambridge, Massachusetts: National Bureau of Economic Research, 2001). A more recent and extended version can be downloaded from http://www.brookings.edu/scholars/cv/wei.htm

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